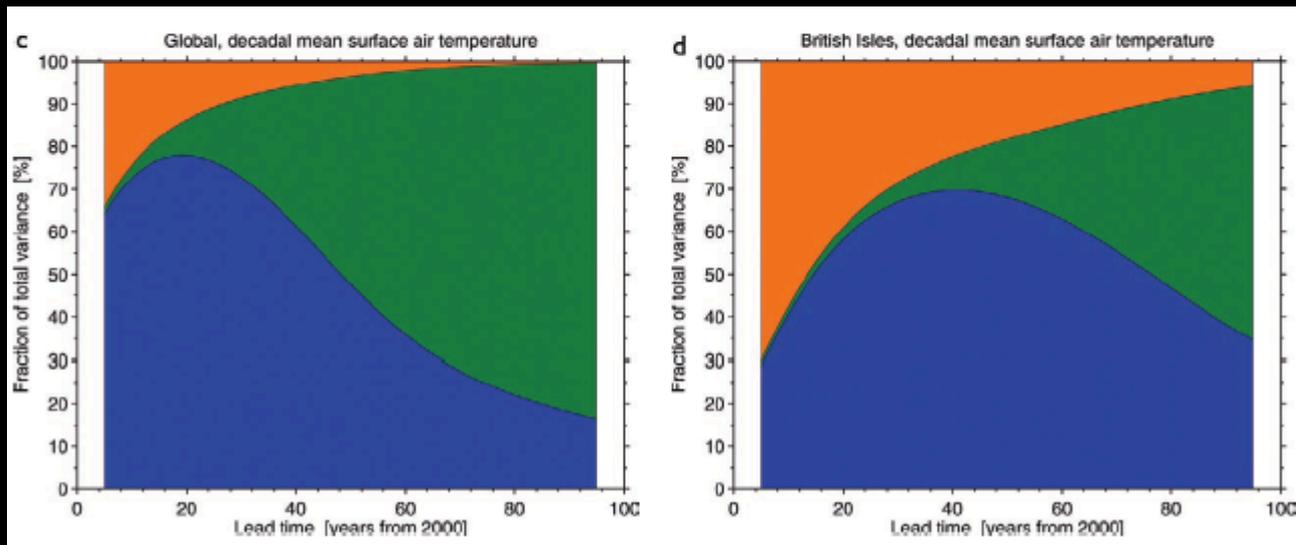


# Usefulness of CMIP to Science & Society

- Improvements [since CMIP3]
  - Ensembles
  - More experiments
- Uncertainty
  - Ensembles
  - Performance
  - Processes
- Decadal prediction experiments are not ready for consumption

# How could CMIP be more responsive?

- Community focus
  - Processes → *and their response to CC*
  - *Appropriate scale of information*



– *Looking beyond changes in the mean climate*

# MESSAGES

*that need to come from the Climate Community*

- CMIP-CC models are designed to capture externally-forced trends, not the temporal evolution of variability
- Trends (esp GHG-related) cannot be well assessed over periods shorter than 50-60 yrs
- CMIP ensemble represents some uncertainty, but should NOT be interpreted as quantitative uncertainty estimates
- ASK QUESTIONS